Enterprise Technology Strategic Plan 2018-2022

Information Technology

Updated: August, 2018

Contents

Introduction 1
City of Bellevue Mission, Vision and Values 1
Information Technology Mission 2
Message from the CIO 3
Guiding Principles 5
Technology Strategy 6
Enhancing Digital Government 8
Supporting Business and Workforce Productivity 10
Embracing Technology Innovation 12
Current State 15
Technology SWOT Analysis 15
Strengths 15
Weaknesses 16
Opportunities 17
Threats 17
Technology Trends 18
Internet of Things (IoT) 18
Advanced Vehicles 18
Virtual Reality/Augmented Reality 19
Faster Connectivity 19
Artificial Intelligence/Machine Learning 19
Other Technology Trends 20
Information Technology Department Services 21
Next Steps 25

Introduction

The purpose of the Enterprise Technology Strategic Plan is to align technology priorities and resources with the city's overall vision as set by the City Council. Bellevue is the fifth largest city in Washington, with a population of more than 140,000. It is the high-tech, retail and services center of the Eastside, with more than 130,000 jobs and a gleaming downtown skyline of high-rises. Bellevue's demographic, with over a third of its population being foreign-born, has contributed to a culturally rich environment.

The Enterprise Technology Strategic Plan, managed by the Information Technology Department (ITD), looks at the emerging technology needs and major trends that will face the City of Bellevue in the coming years. It defines technology strategies to achieve the City Council's Vision and Priorities, and to further serve the community. The Enterprise Technology Strategic Plan was last updated in 2015, and this version takes a five-year planning horizon with scheduled updates that align with the city's biennial budget process.

City of Bellevue Mission, Vision and Values

The broader city mission, vision and values set the foundation for the organization's culture. Technology operations, projects and initiatives must fit within this context. Technology can be a powerful tool to further the city's goals in all these areas.

Mission	Provide exceptional customer service, uphold the public interest and advance the community vision.
Vision	Be a *collaborative* and *innovative* organization that is *future focused* and committed to excellence.
Core Values	• Exceptional public services • Stewardship • Commitment to employees • Integrity • Innovation

The City Council adopted a 20-year vision that includes seven strategic target areas and three-year priorities to guide budget decisions. While technology will be used to make progress across all target areas, the following statements from the Council Vision specifically highlight the role of technology in creating "the city where you want to be."

Economic Development	*"Infrastructure is ample and in excellent condition, including roads, rails, high-speed data, reliable electricity and clean water."*
Transportation and Mobility	*"A state-of-the-art intelligent transportation system moves people through the city with a minimum of wait times and frustration."*
High Quality Built and Natural Environment	*"Bellevue is a Smart City with a clean, high-quality environment and excellent and reliable infrastructure that supports our vibrant and growing city, including high-tech connectivity."*
Great Places You Want to Be	*"Bellevue College, the Global Innovation Exchange, and our other institutes of higher learning are connected physically and digitally from Eastgate to Bel-Red, Downtown, and the University of Washington in Seattle."*
High Performance Government	*"We make public investments wisely, assuring taxpayers that we are living within our means, but also ensuring that we have superb infrastructure to support growing businesses and desirable residential opportunities."*

Information Technology Mission

> The Information Technology Department partners, innovates and evolves to deliver high value, customer-focused solutions.

The ITD mission focuses on what is needed to meet the technology and business challenges in upcoming years: **partnership** to achieve effective solutions that optimize operations and services; a commitment to **innovation** with the organization and community; and a responsibility to continue **evolving** our services and technology to meet rapidly changing city needs. ITD's role related to the Enterprise Technology Strategic Plan is finding ways to inspire customers with emerging technology trends and finding opportunities to apply new capabilities to enhance service delivery and efficiency. ITD leverages its expertise in technology procurement, IT security, system integration, technology portfolio management and IT best practices to ensure successful selection and implementation of technology solutions.

Message from the CIO

Sabra Schneider,
Chief Information Officer

The City of Bellevue is a thriving high-tech hub, a city in a park and a city that welcomes the world.

As technology rapidly changes, communities have many opportunities to leverage technology to enhance the quality of life, further engage with stakeholders, and shape smart, predictive and proactive service delivery. Technology should be reliable, accessible and easy to use. Internal and external customers expect innovative and cost-effective technology services.

The five-year enterprise technology strategic plan sets the vision for how the Bellevue can achieve these goals. This vision is shaped by City Council Priorities, the city's Leadership Team and input from departments that use our services.

The plan is ambitious, yet achievable, through strong partnerships inside and outside city government, and through the exceptional work of our dedicated, inventive IT Professionals.

This is an exciting time for ITD and our community. I hope you learn how Bellevue is partnering, innovating and evolving to deliver high value, customer-focused solutions.

Enterprise Technology Strategic Plan 2018-2022

Guiding Principles

The purpose of the Enterprise Technology guiding principles is to ensure that strategies, policies and practices are aligned. It is also aimed at support the overall business and strategic objectives of the city. The principles serve to guide decision-making in a resource constrained environment.

1. Technology investments are driven by public benefit including:
   - Prioritizing investments that support the strategic direction of City Council and City Manager's Office;
   - Ensuring efficiency across the enterprise portfolio;
   - Adopting a user-centered approach to technology deployment.
2. To ensure successful solutions for business technology projects, ITD partners with departments in:
   - Evaluating and streamlining business processes before making technology investments;
   - Ensuring business practices align with industry best practices, laws and regulations;
   - Adopting consensus-based, decision-making where all stakeholders support solutions;
   - Leveraging off-the-shelf cloud solutions;
   - Using existing applications, systems and infrastructure when feasible;
   - Decreasing customization and custom-built solutions.
3. ITD retains responsibility for the enterprise technology portfolio with a lens for increasing the efficiency, effectiveness and sustainability of investments by:
   - Ensuring standards are met for security, enterprise architecture, integration, identity management and data management for all technology systems;
   - Scoping investment and technology lifecycles;
   - Reviewing technology purchases and contracts to ensure both financial sustainability and long-term functionality of the solution;
   - Pursuing regional partnerships in areas that benefit from standardized service delivery and cost savings.

4. The City of Bellevue's records are the public's records. The city ensures transparency by providing timely and efficient internal and external access to information by:
    - Establishing policies for managing the data the city collects, including compliance with local, state and federal regulations;
    - Establishing procedures for protecting private information that is exempt from public disclosure;
    - Establishing guidelines that govern the use of data collected that respects the desires of the public for privacy within the parameters of applicable law.
5. Innovative technologies are encouraged, while balancing risk and rewards.
    - Bellevue supports entrepreneurial partnerships with other public and private sector entities ;
    - ITD supports technology innovation with pilot projects.

Technology Strategy

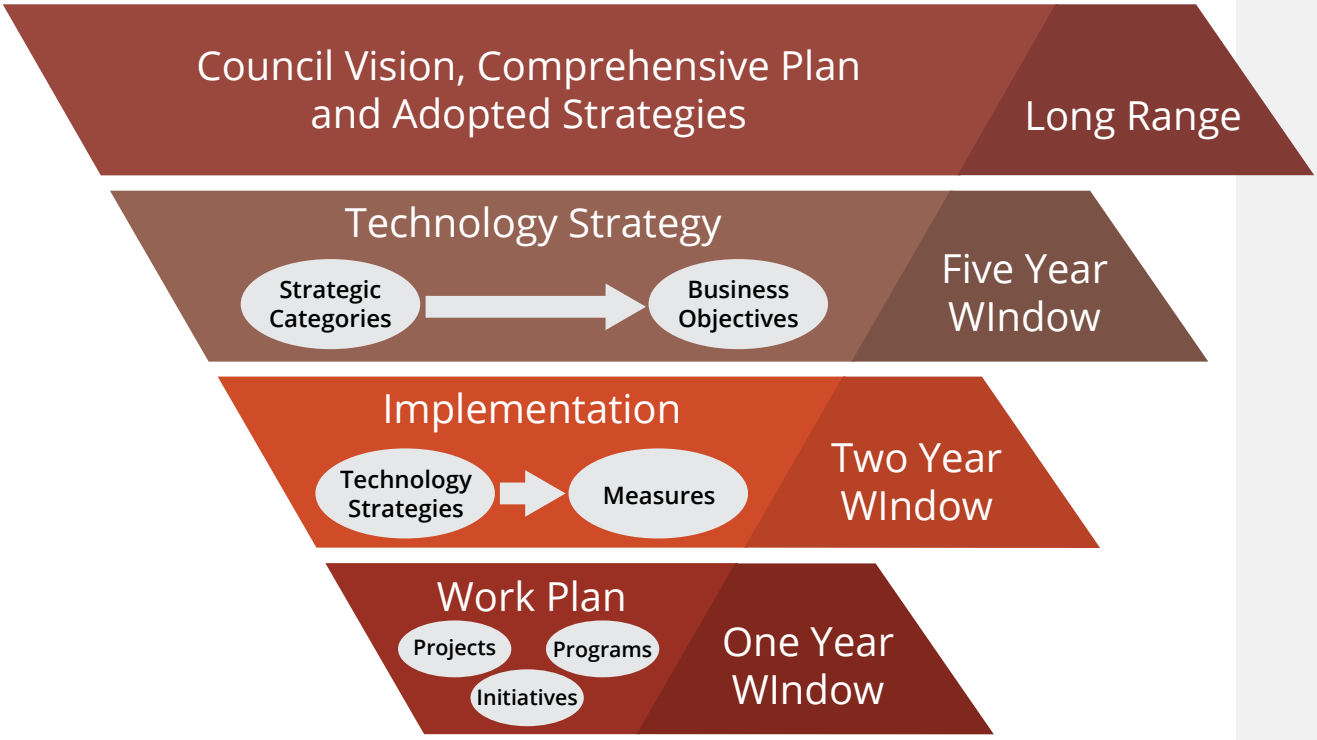
The three strategic categories reflect feedback from department stakeholder meetings, the council priorities and shifts in strategic direction for ITD. These categories and related objectives form the core of the Enterprise Technology Strategic Plan for the upcoming five-year period. The categories are detailed on pages 8-13 and include Enhancing Digital Government, Supporting Business and Workforce Productivity and Embracing Technology Innovation.

- **Strategic Category:** Defines the key focus areas for the next five years in alignment with City Council Vision and Priorities, Comprehensive Plan and other City Council approved strategies such as the Economic Development Plan and Diversity Advantage Plan.
- **Business Objectives:** Defines the primary objectives, observable outcomes or achievements under each Strategic Category.

To turn strategies into reality, more detailed implementation planning is conducted as part of the city's biennial budget process and as part of ITD's annual work planning. Each project or major action undertaken furthers the goals within the strategic categories.

- Implementation Plan: Includes the technology strategies or major actions to achieve objectives and defines measures for how progress will be gauged toward achieving the objectives.
- Work Plan: Identifies the specific projects, programs or initiatives that achieve the technology strategies.

Connecting Vision to Action



The strategic categories align with and support the Council Vision and Priorities, community vision in the Comprehensive Plan, Economic Development Plan strategies and Diversity Advantage Plan commitments.

Enhancing Digital Government

- **Council Vision:** We support public engagement and connectivity.
- **Comprehensive Plan:** Bellevue's actively engaged citizenry shapes the city's future. The city makes citizen engagement a high priority, and residents know that their local government listens and responds to them.
- **Council Priority:** Build trust in government by developing and implementing a comprehensive communication plan with proactive strategies and systems, and robust, transparent, open public engagement processes. Characteristics that were discussed include:
  - Share clear and timely information
  - Engagement – getting input
  - The more we listen, the more responsive we are
- **Diversity Advantage Plan Commitments:** Enact and uphold equitable policies and practices. Provide programs that are responsive and accessible to all.

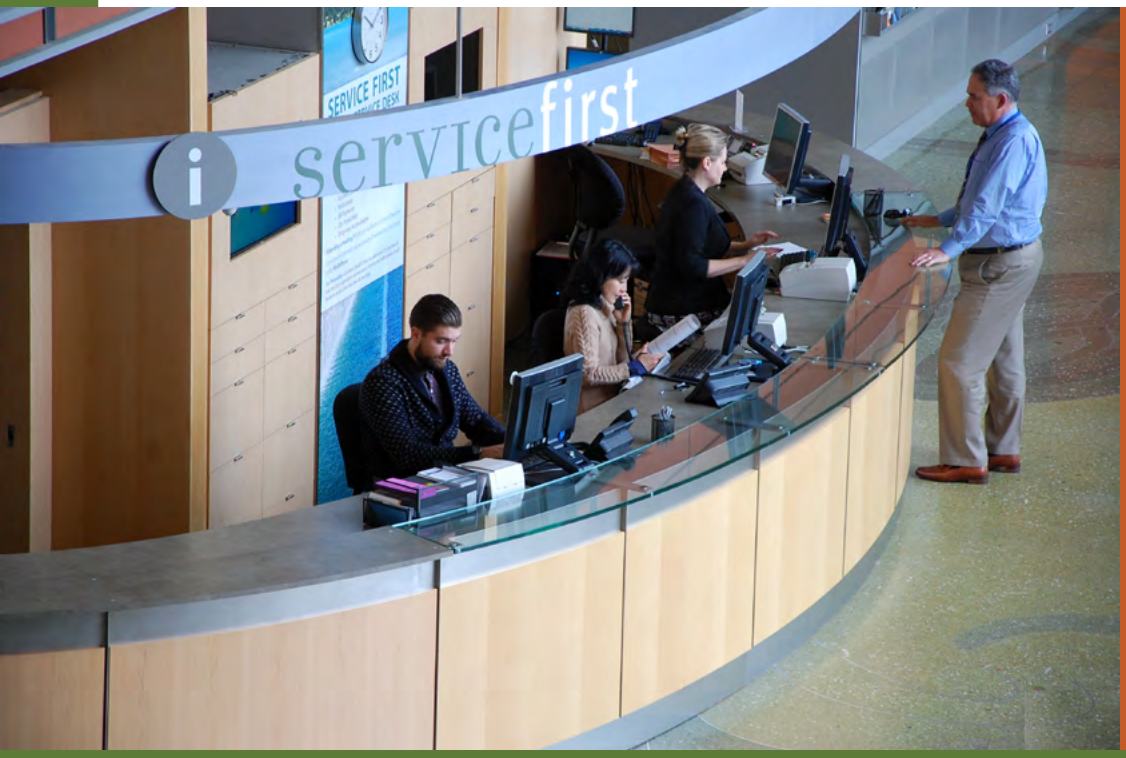
CATEGORY ONE: ENHANCING DIGITAL GOVERNMENT		
Strategic Category Overview	**Business Objectives**	**Technology Strategies**
Partnering with internal and external stakeholders, ITD will drive enhancements to digital government services. These services will reflect a One City, user centered approach to engaging with the public, where it's easy to find information and connect with government. Our digital services should also support the city's changing demographics, and inclusion of these diverse voices aligns with the adopted Diversity Advantage Plan. Technology can enable opportunities to connect with a wider audience and strengthen relationships within the community.	**Objective 1:** Continue to transform bellevuewa.gov by building a digital government service that focuses on user needs and services.	1. Develop a digital government road map. 2. Evaluate, select and adopt a comprehensive set of digital tools used to deliver services to residents, including consistent engagement tools. 3. Evaluate and leverage emerging capabilities in translation, closed captioning and other tools that expand accessibility.
	Objective 2: Manage outreach activities more efficiently to ensure Bellevue's strong customer service ethic is reflected in digital government.	1. Optimize use of customer relationship management (CRM) tools to provide a better customer experience. 2. Train internal teams on new tools and user centered design principles. 3. Ensure public facing tools are easy to use and provide information on how to use when applicable. 4. Organize data to make information easier to find.
	Objective 3: Increase community access to the internet, economic opportunities and city services.	1. Expand public Wi-Fi to create more opportunities across the city to connect to the internet. 2. Increase accessibility and ADA compatibility in city technologies. 3. Partner with community and regional partners to remove barriers to participation and access in technology advancement. 4. Advance digital equity offerings through partnership.

Supporting Business and Workforce Productivity

- **Council Vision:** Bellevue is characterized by high-performance government. People are attracted to live here because they see that city government is well-managed. Our high quality of customer service ensures that residents realize a direct link between their tax dollar investments and the services they receive.
- **Council Priority:** Identify and implement technologies that improve the city's customer service.

CATEGORY TWO: SUPPORTING BUSINESS AND WORKFORCE PRODUCTIVITY		
Strategic Category Overview	**Business Objectives**	**Technology Strategies**
As technology continues to shape core business functions, ITD's partnership with internal customers is critical to successful technology adoption. From information security to workforce mobility, technology continues to change quickly. Technology-enabled processes and technology-fluent staff can enhance overall organizational agility.	**Objective 1:** Increase speed of technology execution to create more organization capacity for innovation and continuous improvement.	1. Develop integration standards, tools and processes to accelerate automation and system integration requests. 2. Prioritize continuous improvement projects that actively target and reduce productivity drains. 3. Continue expanding opportunities to go paperless with electronic forms, workflow automation and scanning/ digitizing documents.
	Objective 2: Enable a mobile, technology savvy workforce with the tools they need to better serve the community.	1. Continue expanding and improving mobile workforce efforts to enable "work anywhere" and optimize field adoption. 2. Expand staff's comfort with emerging technologies and their competency with applications and devices to improve business processes.
	Objective 3: Partner with stakeholders to evaluate and optimize software portfolio to better serve business needs.	1. Establish lifecycle guidelines and processes to evaluate new technology investments. 2. Align technology business practices to industry standards and best practices to minimize expensive maintenance and customization.

CATEGORY TWO: SUPPORTING BUSINESS AND WORKFORCE PRODUCTIVITY		
Strategic Category Overview	**Business Objectives**	**Technology Strategies**
	Objective 4 Advance continuous development of the information security program, including updating and executing on security and data policies to reduce vulnerabilities that disrupt organizational operations and increase efficiencies through improved data access and use.	1. Continue partnering with departments to conduct ongoing security risk assessments and quickly remediate significant findings. 2. Ensure procurement procedures and policies include information security reviews. 3. Maintain appropriate data classifications and ensure appropriate privacy principles are applied. 4. Expand information security training for staff. 5. Evaluate and implement enhanced security best practices as they mature.

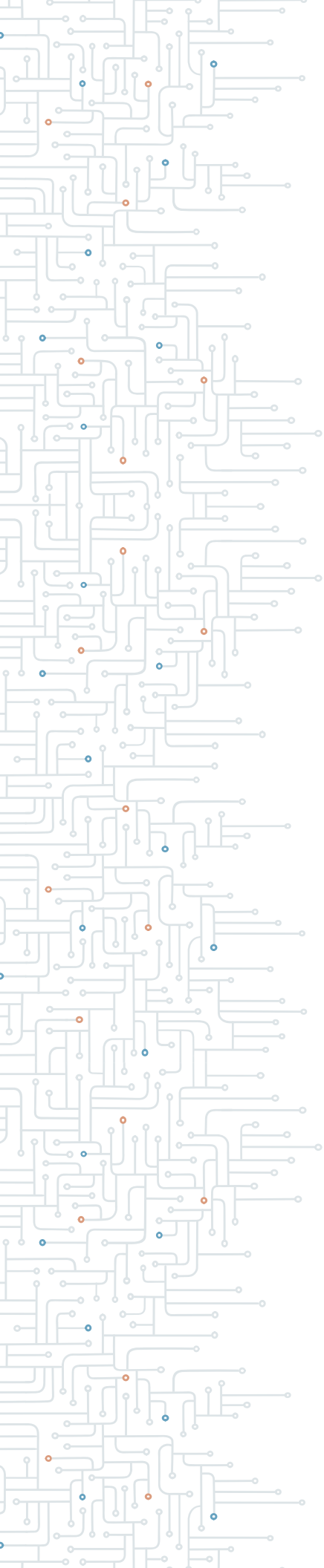


Embracing Technology Innovation

- **Council Vision:** Bellevue is a "smart city" with a clean, high-quality environment and excellent and reliable infrastructure that supports our vibrant and growing city, including high-tech connectivity.
- **Council Priority:** Advance implementation of the Smart City Strategy, including advanced transportation technology and autonomous, connected, electric and shared vehicle technologies.
- **Economic Development Strategy:**
  Cultivate Bellevue's next generation of technology entrepreneurs

CATEGORY THREE: EMBRACING TECHNOLOGY INNOVATION		
Strategic Category Overview	**Business Objectives**	**Technology Strategies**
Becoming a smarter city means utilizing advances in the data analytics, internet of things, autonomous vehicles and pervasive connectivity to improve services, optimize operations and achieve the City Council Vision. Technology advances in augmented reality, artificial intelligence, drones, robotics and more provide opportunities to spur creativity and innovative approaches to meet emerging business needs.	**Objective 1:** Achieve the smart city objectives in the *Bellevue Smart Plan* to improve livability, sustainability and resiliency.	1. Focus on deploying proactive and adaptive solutions. 2. Drive with data to improve decisions and operations. 3. Pursue partnerships to keep Bellevue in the forefront of innovation. 4. Leverage regional relationships to extend benefits beyond Bellevue's borders.
	Objective 2: Use data to effectively inform decisions and shift operations to more proactive, predictive service delivery.	1. Establish broader access to data for employees, partners and the public. Establish enterprise data catalogs (one-stop shop for city data.) 2. Train users on data catalog use, analytic tools and visualization strategies. 3. Advance artificial intelligence technologies and tools to support predictive service delivery.

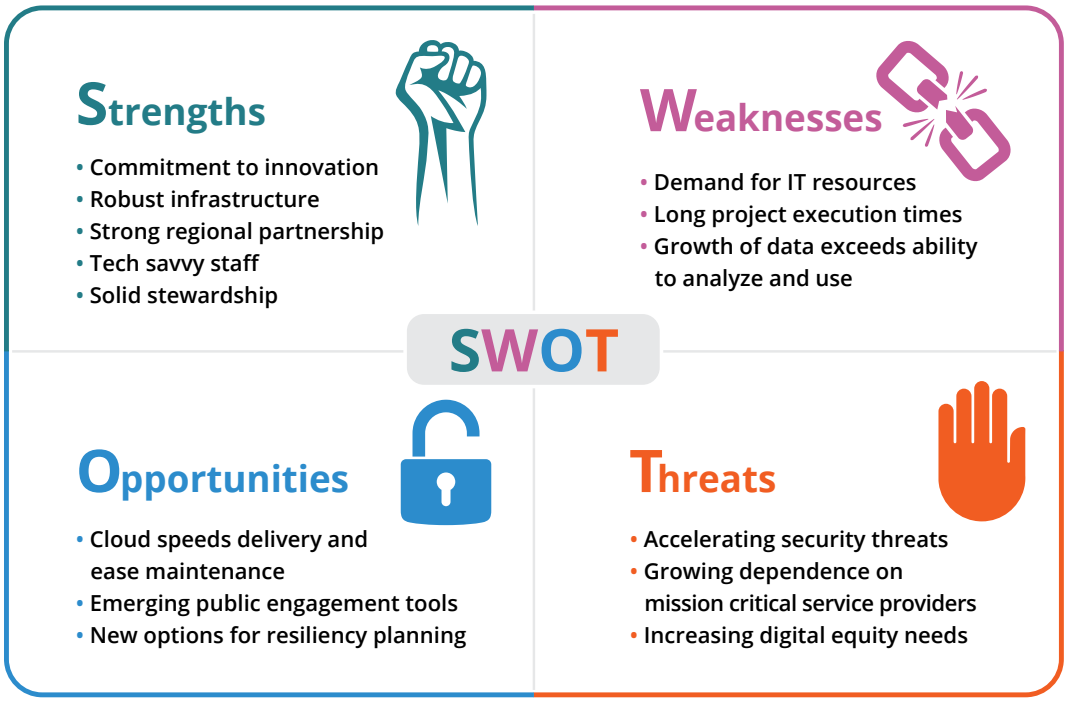
CATEGORY THREE: EMBRACING TECHNOLOGY INNOVATION		
	Objective 3: Increase opportunities to use and assess innovative technologies and speed up adoption of useful advances.	1. Develop and update policies that support innovation including privacy and security policies and standards. 2. Collaborate to select high impact technologies to develop innovation pilots and programs. 3. Partner with private sector technology companies to support innovative technology advancement. 4. Develop budget strategies that enable useful technology to move from pilot to implementation.



Technology SWOT Analysis

The aim of any strengths-weaknesses-opportunities-threats (SWOT) analysis is to identify the key internal and external factors that are important to achieving objectives. SWOT can be helpful to quickly portray the current state. It is defined as:

- **Strengths:** Attributes of the organization that are helpful to achieving the objective.
- **Weaknesses:** Attributes of the organization that are harmful to achieving the objective.
- **Opportunities:** External conditions that are helpful to achieving the objective.
- **Threats:** External conditions which could do damage to the business's performance.



Strengths

1. The City Council and city management have a strong commitment to innovation and the use of technology to achieve business goals. The strong ethic and commitment to high performance organization (HPO) and belief that the city should function as "One City" fosters an environment that is conducive to technology innovation. It also encourages cross-department collaboration on technology initiatives.

2. The city's technology infrastructure is robust, modern and secure. This includes redundant data centers that have necessary physical and environmental controls, a high-speed internal network, connections to a high-speed regional fiber network,

significant investments in conduit and fiber throughout Bellevue, and high-speed connectivity to the internet. This gives Bellevue strategic flexibility that similar jurisdictions may not have. The city hosts applications on-premise in its data center or subscribes to cloud services, which allows the department users to choose the option that is cost effective and meets functionality needs. The city invests in Smart City initiatives, like adaptive traffic management and smart water meters, and leverages its available network infrastructure.

3. The city has a strong and effective commitment to regional partnerships. This includes:
   - The Community Connectivity Consortium (C3) which built a regional fiber ring with 26 regional partners that will spur future innovation and economic development. The fiber ring connects the Global Innovation Exchange (GIX) in Bellevue to the University of Washington and connects schools, Bellevue College and medical facilities.
   - The regional eCityGov Alliance and ITD provides software development, project management, business analysis and financial services for more than 30 governments throughout the region.
   - ITD provides data center colocation services for other public entities.
   - ITD also supports regional opportunities for information sharing and education, such as Smart City conferences, Government SharePoint Users Groups and Spark innovation events.
4. Strong technical acumen and skills across all city staff. Bellevue has attracted talent that is forward thinking, has a high level of technical skill, and a desire to see the city become more innovative.
5. Strong financial stewardship and investment policies that support a long view of technology investment.

Weaknesses

1. The demand for new applications and technology solutions currently exceeds the capacity of ITD and departmental staff to meet that demand.
2. Overall, the time to execute and deliver on technology projects is too long. Some of the primary reasons for this include:
   - The Bellevue culture of excellence and desire to provide a very high level of customer service has oftentimes led to building applications that are customized to Bellevue processes rather than aligned with industry best practices. This high level of customization increases project implementation times, and ongoing maintenance costs, while also complicating future upgrades.

- The city has been slow in adapting to emerging technology and standards which can reduce overall development time.
- A strong desire to have all functionality included at the front end of a project, rather than a philosophy of trying to get the most critical up front and adding the remaining over time.

3. The volume of data that the city is collecting continues to grow at a compound rate. Our ability to effectively use data to make business decisions and proactively understand trends is limited. Skillsets within ITD and department staff need to be enhanced, along with the tools and infrastructure to facilitate this type of analysis.

Opportunities

1. The pervasive availability of cloud services for technology applications and infrastructure provides an opportunity to speed up the delivery of new services and applications while reducing ongoing maintenance.
2. Cloud services and the regional connectivity options can be used to improve the city's disaster recovery posture.
3. There now exists an array of tools and applications that can improve the level of engagement and customer service with residents and stakeholders. This includes tools to: increase two-way dialogue with stakeholders and get opinions from a diverse set of people, perform surveys that reach a wider audience, manage interactions with stakeholders to serve them better, website tools to provide easier access to information, translation tools, and increased ability to meet ADA guidelines.
4. Partnership opportunities with the regional technology community (individuals, businesses and public sector) can be pursued to augment the work of ITD and to leverage the wealth of expertise in our city.

Threats

1. Security threats continue to expand to critical infrastructure, staff, technology partners and vendors. There is a large threat to the city's credibility if citizen information is compromised, which would reduce the level of trust for many important city initiatives.
2. The city continues to rely on regional partners, vendors and the internet for mission critical services. For example, the city relies on the internet to deliver many services and disruption to the internet can disable a variety of functions.
3. The city continues to be concerned about the digital divide and ensuring all Bellevue stakeholders have reliable, affordable access to the internet. Connectivity inequities have the potential to hamper economic growth, education and individual opportunities.
4. Achieving the Strategic Plan is dependent on technology funding availablilty.

Technology Trends

The City of Bellevue's strategic initiatives and technology direction in the coming years will be shaped by global forces and technology trends impacting everyone. These trends have good potential if done right and great risks if not planned for. As Bellevue considers innovative technology solutions, new principles and guidelines will need to support and balance the desires of the public for privacy within the parameters of applicable laws, including public disclosure.

Internet of Things (IoT)

The proliferation of smart devices (controllers, sensors, machines) connected to the internet and producing enormous amounts of data, is what enables a Smart City to improve operations, services and infrastructure. These atributes can increase the quality of life, sustainability and resiliency of a community. Embedded machine learning and artificial intelligence can also enhance automation and efficiencies. IoT is used today in the city's adaptive traffic system managing traffic signals, the SCADA system controlling the city's water system and networked building systems managing facilities. More IoT-enabled systems will be deployed in the future with advanced water meters and intelligent streetlight controls. These smart systems produce real-time data that will require greater abilities in data analytics and visualization. Bellevue's Smart City Strategy harnesses these advanced technologies in the areas of connectivity, transportation, public safety, water, buildings and energy. The strategy also outlines the coordination needed to increase interoperability and proactive and predictive decision making.

Advanced Vehicles

Vehicles are quickly becoming automated and connected. Connected vehicles use sensors and communicate with other entities to sense their physical environment and interact with other vehicles. Autonomous vehicles operate without a human driver. High speed wireless communications, low-cost sensors and cameras, new mobility services that include car sharing and ride-hailing, and substantial shifts in car ownership expectations are shaping the vehicle industry toward a smarter mobility, with huge benefits in safety (fever accidents), efficiency (higher usage of vehicles) and traffic (smarter vehicles optimize traffic flow). For the city, this can mean greater mobility options for residents who cannot or should not drive while also achieving the Vision Zero goals of reducing traffic fatalities and serious injuries. This goal can be achieved with the adaptive traffic system integrating with connected vehicles to reduce accidents along with potential shifts in land use to accommodate more ride sharing over parking uses.

Virtual Reality/Augmented Reality

Immersive interfaces, such as augmented reality (AR) and virtual reality (VR), are quickly evolving and finding practical applications. VR is full immersion where reality is replaced with a virtual experience using headsets, while AR is reality with added information via visors or on smart devices. VR can be used for remote virtual meetings or training sessions and AR can be used in urban planning where a possible future can be superimposed on the current landscape. Specific examples for the city could include 3D videos of events or locations for public outreach, inspectors overlaying asset data, as-built drawings of infrastructure behind a wall or under a street, and fire fighters with helmets displaying sensor data and building diagrams to help with their situational awareness.

Faster Connectivity

Wireless cellular carriers are struggling to keep up with demand for mobile data usage from streaming videos, photo sharing and always connected customers. Today's 4G wireless delivers roughly 300 megabits/sec but is not enough to meet the needs of a vibrant, high-tech economy and a smart city. The next generation 5G standard can potentially support up to 10 gigabits/second and is in development and early pilot deployment now. 5G wireless delivers high bandwidth capacity and high responsiveness which can support the connectivity needs of autonomous vehicles. A promising outcome can be that wireless speeds are high enough to overcome the 'last mile' challenge of wired connections, thus more easily expanding the availability and choice of high speed services for residents. As mobile broadband speeds evolve, this can be a viable alternative to offering gigabit internet services that residents desire without the lengthy and costly impacts of installing traditional cable or fiber optic wires.

Artificial Intelligence/Machine Learning

Artificial Intelligence (AI) harnesses the explosion of data and combines it with advanced computing and algorithms that allows systems to sense, understand and interact with its environment like a human would. AI involves perception (the ability to recognize and identify images, objects, sounds and cognition) and the ability to problem solve. Combine this with machine learning (the ability for computers to discover patterns and learn from data) and now a system can learn on its own and continue improving its performance. AI/machine learning is at the heart of autonomous vehicles, predictive analytics and advanced robotics. Both are expected to transform many sectors from manufacturing to health care to government.

Other Technology Trends

These additional emerging capabilities will also enhance use of technology as they mature and become more mainstream in the next few years:

- **Voice Command:** Voice is a quickly maturing area of human-computer interface that combines advances in sensors, speech recognition and natural language processing. Personal assistive technologies, such Alexa, Cortana and Siri, can execute commands while driving, hands are busy doing other tasks or otherwise unable to manipulate keyboard or mouse.
- **3D Printing:** Advances in 3D printing have already enabled 3D printers to use a wide range of materials, such as alloys and composites. This capability is driving user demand as the practical applications for 3D printers expand to more sectors. Printing components and supplies, instead of buying and delivering them, may be in our future.
- **Drones:** As drone technology becomes more affordable, some governments are deploying drones to enhance public safety rescue operations, streamline inspection services, provide promotional video and images, and real time video.

Information Technology

Department Services

ITD delivers comprehensive IT services to all departments in the city. The public also benefits directly from services such as the city website and Wi-Fi.

Application Development and Design

Application Development develops and supports software, websites and mobile applications used by city departments when needs cannot be met by commercial off-the-shelf products. Application Development also develops applications for the eCityGov Alliance, a regional organization serving multiple jurisdictions. Services include:

- Requirements gathering
- Software design, development and testing
- Support and maintenance
- Graphics design services

Business Operations

Business Operation provides leadership, administration and oversight for ITD to ensure services align with the direction of the City Council and City Manager. In addition, the division help to achieve of the goals of each line of IT service, provide efficient financial and administrative support, and advance effective personnel practices that create a high performing work culture.

- Strategic technology planning and customer alignment
- Budget development and monitoring
- Business support including analysis and administrative services
- Accounting

Computer Technology Services

Computer Technology Services focuses on effective delivery and support of technology services to city staff and eCityGov Alliance customers, including:

- First line of support for technology issues
- Hardware and software replacement
- Maintenance and troubleshooting of supported technology
- Training and education for city employees to increase productivity with technology resource

Geospatial Technology Services

Geospatial Technology Services delivers high-quality mapping and data solutions and services, using Geographic Information Systems (GIS). GIS serves as an organizational platform for visualizing location-based information, enables an efficient map-driven mobile workforce and increases transparency through interactive web maps for the Bellevue community. This service includes:

- Acquisition and maintenance of geographic data
- Data analysis and mapping services
- Support for mapping applications, including web and mobile

Network System and Security

Network System and Security manages the core technology infrastructure (including network, servers, information security, systems and services) for the city to ensure that staff have access to all the technology resources required to conduct operations, provide services, and communicate with the public and other organizations. The infrastructure must operate 24 hours a day, 7 days a week and have the appropriate level of resiliency, security, privacy and protection to withstand disruptions or disasters. Services include:

- Data center facilities that house IT infrastructure equipment
- Wired and wireless networks to enable the city's systems to connect and communicate
- Connectivity to external providers for phone, internet and wireless services
- Phone system serving all city facilities, servers that run all major applications and databases that contain critical information for all departments
- Security Program that protects the confidentiality, integrity and availability of the city's systems and information with a "defense in depth" strategy to protect, detect, and respond to any security incidentsalong with privacy guidelines to ensure appropriate controls over staff and customer information

Technology Business Systems

Technology Business Systems selects, implements and supports critical business applications used to deliver vital services including permitting, billing and payment, inquiries and problem reporting and records and work orders. Customers also expect appropriate and timely information in the form of alerts, web and mobile applications and access to data. Services include:

- Project management of major IT projects
- Maintenance and support of purchased systems
- Optimizations and enhancements to align applications to operational needs of departments

Bellevue ITD services continues to evolve to meet shifts in demand. A quick illustration of the shift that has happened over the years is depicted below.

	2013	2017
Bellevue Population	131,500	140,700
City Staff (full-time equivalent)	1,228	1,342
ITD Staff (full-time equivalent) [1]	50.5	54
Servers	272	305
Supported Applications	105	118
Mobile Devices [2]	696	805
PCs/Laptops	1,500	1,949
Calls to Help Desk (annual)	—	14,058

[1] *Does not include IT staff dedicated to regional service delivery.*

[2] *Includes shift from cell phones to smart phones.*

ITD uses performance management to ensure effective and efficient delivery of its services. As IT demand and services has changed, internal customer satisfaction surveys have been conducted regularly, and ITD has maintained over 80% reporting Good or Better overall satisfaction with services. In 2017, 87% of respondents report they have the technology to be effective in their jobs.

Next Steps

As Bellevue begins to implement the Enterprise Technology Strategic Plan in 2018, IT services are growing in collaboration with internal and external demands. The technology focus areas of Enhancing Digital Government, Supporting Business and Workforce Productivity and Embracing Technology Innovation will support prioritization of technology projects for the city.

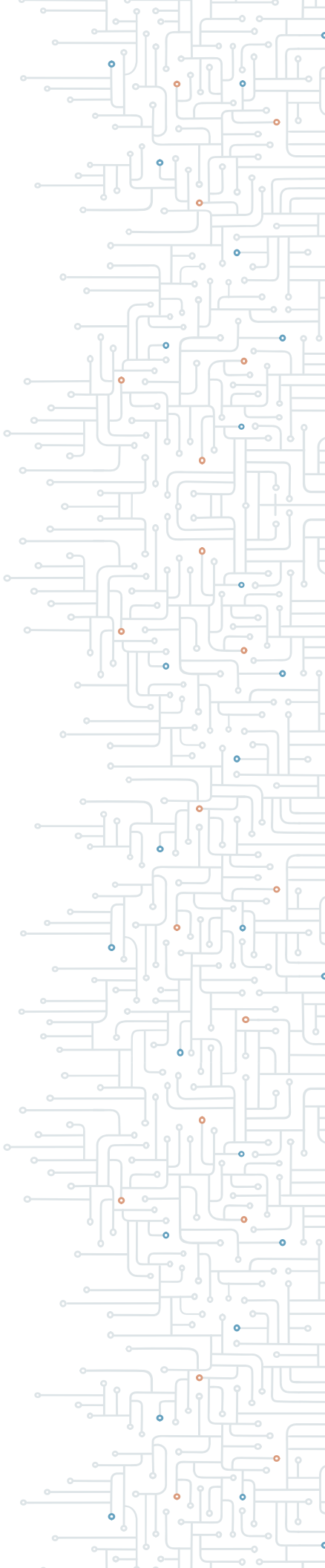
The updated guiding principles chart a new path for city IT projects, ensuring technology stakeholders are:

- Aligning closely to business functions;
- Increasing efficiency and sustainability;
- Implementing standards for information and data security;
- Adopting a user-centered approach to deployment.

Future ITD workplans and priorities will support the strategic plan and guiding principles. ITD will report progress annually and update the strategic plan as needed during the five-year lifecycle.

The Information Technology Department partners, innovates and evolves to deliver high value, customer-focused solutions.

NOTES



Information Technology